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BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE FILING BY IDAHO POWER COMPANY OF ITS 2002 INTEGRATED RESOURCE PLAN (IRP)	)	CASE NO. IPC-E-02-08

COMMENTS OF IDAHO RIVERS UNITED, NW ENERGY COALITION, and LAND AND WATER FUND OF THE ROCKIES

On June 28, 2002, Idaho Power Company (IPC) filed its year 2002 Integrated Resource Plan (IRP). These are the comments of Idaho Rivers United, NW Energy Coalition, and the Land and Water Fund of the Rockies on that filing.

We ask that the Commission reject the 2002 IRP, and hold formal proceedings in this matter[1] for at least three reasons:

(1) IPC's failure to identify and analyze potential load management and conservation resources with any specificity or rigor borders on the comical, and must be corrected. IPC's customers and the Commission deserve to understand through the Integrated Resource Planning

[1] See Motion to Initiate Formal Proceedings by Clean Energy Advocates, filed herewith.

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process **all** potential resources that could be employed to ensure that electric service is provided in the most economical and dependable manner.

(2) The IRP obviously was grounded on the assumption that IdaCorp's "Garnet" combined cycle facility would be constructed in the near future. With the Commission's recent dismissal of Idaho Power's application for approval of a power purchase contract from the facility – and Idaho Power's own admissions that construction of the plant is now unlikely – we strongly believe that the IRP must be re-drafted, following investigatory hearings, to address the need to acquire new resources. Again, such review should follow a primary careful look at load management and conservation resources. We understand the Company is initiating a peak load conservation analysis through the Energy Efficiency Advisory Group – this analysis must be incorporated into the IRP.

(3) Idaho Power's new planning criteria for IRP development (moving to more extreme water and weather conditions) represents a significant change, which we believe deserves closer scrutiny by the Commission and interested parties.

In general, we are concerned that the IRP does not outline a plan to meet customer energy needs in a cost effective manner, but instead is presented as a justification for IPC to sell more energy from IdaCorp-controlled facilities.

I. PLANNING CRITERIA

IPC's past failure to plan for drought conditions helped lead to poor environmental stewardship (*e.g.* dewatered sections of the Snake River, deployment of diesel generators, et cetera) and record-breaking rate increases of last year's energy crisis. It is critical that Idaho Power develop a contingency plan for the years of poor water and weather conditions.

However, the IRP gives scant attention to contingency planning. Under "Contingency Plans" the IRP merely mentions that its Energy Exchange Program with industrial customers and irrigation buy back can be reactivated on short notice if necessary to respond to extreme conditions. IRP at 3. There is no analysis of these programs and their cost-effectiveness or whether other programs are better suited for addressing extreme conditions. The IRP also fails to discuss what "extreme" conditions would trigger reactivation of these programs.

Instead of developing a contingency plan to meet load under poor water and weather conditions, IPC has chosen to plan under the fiction that every year will in fact involve such conditions. In our view, this planning protocol may be used to justify over-building generation resources -- not to reasonably and cost-effectively meet IPC customer's needs. This risk is compounded by IPC's failure to seriously analyze any demand-side measures to address any potential shortages under the new planning criteria.

The threat of over-building generating resources is further exacerbated by IPC's use of even more extreme water conditions for forecasting peak hour deficiencies and transmission overloads. While the IRP uses 70th percentile load and 70th percentile water conditions for forecasting energy surpluses and deficits, it uses extreme 90th percentile water conditions for forecasting peak hour deficiencies and transmission overloads.

This disparity only serves to exacerbate the perceived shortages, providing justification for construction of a new peaking facility. Indeed, the company states that "peak-hour loads, and ultimately, peak-hour transmission overloads, will drive the need for additional internal generation and targeted demand side measures that focus on peak reduction." IRP at 57. Notably, the IRP goes into some depth in discussing "additional internal generation," but mentions "targeted demand side measures" only in the vaguest of terms.

Contingency planning should be the cornerstone of IPC's approach. IPC should plan for critical water and load conditions using varied and innovative approaches. Several innovative approaches were proposed by stakeholders during IPC's public meetings that would help IPC cover supply short falls in extreme conditions without having to build permanent new generation. Suggestions included employing financial instruments as an effective "low water insurance," creating interruptible power rates to deal with transmission constraints or supply short falls, and other load management programs. The IRP does not grapple with these ideas.

Contingency planning should be focused on load management. Targeted load management programs to flatten peak demands would be much cheaper than building new generating resources needed only for short periods of the year, if at all. Interruptible power rates and time-of-use metering could go a long way to help flatten peak loads.

II. RESOURCE STRATEGIES

We are concerned with the resource strategy that IPC has chosen. The proposed resource strategy does not seriously address demand-side measures, nor does it seriously consider non-hydropower renewable energy. A rational, risk-minimizing resource strategy would rely on a diversity of tools and resources to plan for future power needs, including both demand-side and

supply-side measures and a diversity of power sources. Instead IPC has focused on supply-side measures from traditional generating resources.

The IRP states that "[u]nder the 70th percentile planning criterion, additional resources or transmission is inevitable." While it may be inevitable that IPC must add new generating resources and/or transmission at some point in the future, that does not preclude IPC from preparing for future shortfalls with a variety of tools.

A. Load analysis

One of the most glaring deficiencies in the IRP is its failure to include a load analysis. IPC cannot effectively plan for meeting its load in the most cost effective manner without adequately understanding the character of that load. Understanding the types, manner, and amount of energy uses which are responsible for load will help the Company determine how best to respond to that load. It can particularly assist the company in determining whether to respond with supply-side measures or demand-side measures.

This is indicative of IPC's lack of any rigorous analysis of DSM measures in the IRP. The IRP states that DSM measures must be carefully targeted, yet it fails to include this crucial data which would help target those measures. A load analysis would help IPC determine what type and what scale of DSM measures would be effective in reducing both base loads and peak loads.

We are certain that DSM measures will be more cost effective than increased power acquisition in addressing loads – particularly peak loads. IPC currently has no ongoing programs or pricing structures (apart from a small pilot time-of-use plan) to encourage customers to shift their energy use to off-peak hours. Construction of new generating resources is expensive and, if IPC relies on fossil fuels, exposes customers to fluctuating fuel prices. Market purchases may

require construction of new transmission lines, in addition to the cost of acquiring the power at uncertain market prices. There are many circumstances in which it will be more cost effective to use targeted DSM programs to shave load peaks rather than engaging in these expensive investments.

B. Selected resource strategy

After laying out four resource strategies that rely heavily on supply-side measures, the IRP concludes that there is no clear optimum choice among the strategies because uncertain market prices make it difficult to determine the least cost strategy. This uncertainty could be lessened by more reliance on demand-side measures, and distributed and utility-scale renewables, which are not dependent on market fuel prices.

IPC chose a resource strategy that would include seasonal market purchases, unspecified DSM measures "where economical" to address short term peaks, a 100 MW peaking facility, 250 MW from the Garnet facility, upgrade of the Shoshone Falls project, and construction of the Brownlee to Oxbow transmission line.

The IRP states that "a blended approach based on a portfolio of options is the most cost-effective and least-risk method of addressing increasing energy demands." However, IPC goes on to adopt a resource strategy that maintains status quo reliance on hydropower and thermal production. A truly blended approach would include demand side management and consideration of other renewable and distributed sources of energy, such as wind power.

IPC's proposed resource strategy is not the kind of innovative and varied approach that would best shield IPC's customers from the kind of financial and environmental disaster we experienced last year.

1) Demand-side management

The IRP says that by 2005 IPC must acquire additional permanent resources. It notes that the three options are market purchases, new generation and transmission resources, or DSM programs. IRP at 4. However, the IRP only seriously considers market purchases and new generation and transmission.

The IRP states that population growth is the main driver in the need to increase generation. However, this ignores the fact that Idaho has the highest per capita energy use of any state in the nation. Thus, DSM measures could go a long way to reducing the impact of population growth on IPC's system. Indeed, the Northwest Power Planning Council has estimated 2250 aMW of energy efficiency and conservation savings in the northwest at a cost of 5 cents/kWh or less. See Direct Testimony of Thomas Power, IPC-E-01-42, at pages 11-12. With Idaho Power serving about 9% of the northwest load – and now engages in only the most minimal of DSM efforts – a conservatively estimated 203 aMW of savings are available in the Company's service territory on a very cost-effective basis. Id.

The IRP pays lip service to the need for DSM measures, but provides no analysis of DSM or any solid proposals. The IRP states that IPC "anticipates" the addition of targeted DSM and targeted energy conservation programs if the PUC approves its conservation measures. However, the IRP does not include any analysis of DSM measures or their cost effectiveness.

IPC proposes to rely almost entirely on constructing new generating resources or market purchases to meet deficiencies. However, these strategies will not necessarily lead to a more reliable power supply or result in the least cost to customers. There has been a huge surge in demand for natural gas in response to last year's energy crisis, which could trigger bottlenecks in natural gas supply that could both limit supply as well as drive natural gas prices up. As

customers learned last year, relying on market purchases is inherently risky and also raises transmission constraint issues. Investing in demand-side measures can help insulate customers from these impacts. DSM measures will reduce customer's bills, protect them against unstable energy prices, and reduce the environmental impact of meeting power demands.

During last year's energy crisis, western states demonstrated how demand-side management can effectively reduce loads during critical conditions. In addition to long term, permanent energy efficiency measures, IPC should have a rapid response demand-side management plan for extreme conditions – and we believe such programs can be carried out at far less economic and societal cost than IPC's "buyback" programs of 2001.

IPC acknowledges that there are "distinct advantages" for customers of a more diverse approach including both supply-side and demand-side measures. However, the company states that "the issue of customer funding for DSM must be resolved for further progress to be made." Of course, the issue of customer funding for DSM is now substantially resolved through the Commission's recent approval of some $2.5 million in new DSM funding. But as a general matter, lack of Commission approval is no excuse to avoid analyzing potential cost effective DSM resources the Company could acquire. Indeed, the Company proposes and analyzes a host of generation resources for which it does not yet have Commission approval.

The Company's payment of some $1.2 million to the Northwest Energy Efficiency Alliance is laudable. Yet at page 3 of its so-called Conservation Plan, the Company admits it "does not estimate the energy savings associated with its expenditures to participate in the Alliance." We support NEEA's important work, and firmly believe the Company's investments in NEEA could be leveraged through complimentary conservation programs to more effectively deliver benefits in Idaho.

The IRP should include an analysis of specific demand-side measures to assess how much power could be saved through those measures and at what cost. This should include analysis of a variety of DSM measures, including conservation and efficiency measures as well as load shifting measures. The analysis should also look at the relative cost effectiveness of different DSM measures amongst different customer classes. IPC cannot assess the benefits of DSM without this kind of rigorous analysis. There are a variety of efficiency resource assessments that could provide guidance to IPC in its analysis.

The IRP notes that peak-hour loads and transmission constraints are the primary drivers of the need for new resources in the planning period. DSM measures would be ideally suited for such short-term deficiencies. Price signals combined with efficiency measures, distributed renewables, and other demand-reducing measures may sufficiently flatten out peaks in demand to avoid the need for expensive new peaking power sources. The IRP must be supplemented to include such analysis.

2) Renewable energy

Another glaring deficiency of the IRP is its failure to seriously consider any non-hydropower renewable energy. The IRP merely states that in addition to the measures identified under its chosen strategy, IPC will take steps "to meet the needs of customers who want green power." These steps consist of participating in "educational and demonstrational energy projects," putting $50,000 towards exploring the feasibility of a pilot anaerobic digester project, and offering customers a Green Power purchase program. The IRP also states that IPC "believes it would be prudent to pursue a pilot wind generation project." Idaho Power appears to view non-hydro renewable sources of generation as charitable undertakings, not as real resources. Thus, instead of seriously considering renewable energy as part of its base energy supply, IPC

has merely proposed expensive piecemeal measures that would not benefit its customers or improve the reliability of the power system.

Constructing small pilot wind or anaerobic digester projects would be expensive and provide little in the way of system benefits. IPC proposes a small pilot wind project in order to assess the costs and benefits of a larger wind project. However, this proposal would predestine the outcome of any investigation into the cost effectiveness of wind. A small pilot project would not accurately reflect the costs of a utility scale project, which would strongly benefit from economies of scale. Smaller wind projects produce power at 7 to 8 cents/KWh, while a larger utility-scale project could produce power at 4 cents/KWh.

Furthermore, a pilot project is simply not necessary and would be a waste of money. Wind is not an experimental source of energy, as utility scale projects are being developed throughout the west. In the past two years, five (5) competitively priced wind projects have come online in Washington and Oregon, totaling over 380 MW. In addition, two more wind projects are under construction and a handful more are in the permitting process, adding about 150 megawatts to the regional energy mix.

IPC should invest money in analyzing potential wind sites, then use that data to actually construct a utility-scale wind project; or enter long-term contracts to purchase power from commercial wind developers in Idaho. There is a plethora of information available on the costs - and benefits of wind power, including detailed Idaho-specific maps of wind potential in this state. The company did not propose constructing a pilot gas plant to determine whether it is a cost effective generating resource—it simply looked at existing data on these sources. It is not financially prudent for the company to spend money on a pilot project that would not benefit

customers or the reliability of the power system or provide accurate information regarding a utility scale project.

IPC also indicates that it would only build a full utility-scale wind project if there was an increase in customer demand for green energy, the PUC or legislature required construction of a wind project, or if the company's projected surplus/deficiency changed to indicate a need for an additional energy resource. In fact, this very IRP repeatedly states the Company's need for additional energy resources, yet IPC does not even consider a non-hydro renewable energy project in any of its resource strategies.

While IPC does include a wind resource in its cost comparison of alternative generating resources, it skews the comparison by looking at resources of vastly different sizes. It compares a 61.2 MW and 88.6 MW conventional combustion turbine resource with a 10 MW wind resource. Using a 10 MW wind project results in an inaccurate comparison with other generating resources. As IPC noted in its most recent IRP meeting, a utility-scale wind project is more likely a minimum of 50 MW, which would be much more cost effective because of economies of scale. Furthermore, in its cost comparison, IPC does not consider the financial benefits of more stable sources, such as wind, which are not subject to market fluctuations, versus sources with more variable costs such as natural gas. In fact, a new study by the Lawrence Berkeley National Laboratory found that utilities pay a premium of about 0.5 cents per kWh to lock in stable prices for natural gas when the gas is used for power generation. The study assigns that 0.5 cents/kWh to renewable energy technologies, particularly wind power, as a hedge value for price stability.

To the extent that new generating resources are necessary, IPC should focus on creating a more diversified power base to include more renewable energy such as wind, solar, and biogas. Currently IPC relies almost exclusively on thermal and hydropower generation. This

homogenous generation base can only exacerbate extreme conditions. Our over-reliance on hydropower contributed to supply shortfalls last year. Reliance on thermal generation puts customers at the mercy of a highly variable fuel market. It is inappropriate to plan for extreme conditions by increasing our reliance on a resource that involves highly variable fuel costs.

Distributed renewable generation should also be an integral part of diversifying IPC's generation sources. This would help relieve supply shortfalls as well as relieve transmission constraints, provide voltage support, and boost grid reliability. Currently, the only distributed generation in IPC's plan is mobile diesel generators which are very expensive and can cause extreme air quality problems for local communities. Further investment in strategically distributed renewable generation could help reduce congestion and potentially delay new transmission and distribution needs.

3) Thermal Generation

The IRP is slanted very much in favor of new thermal generation from facilities owned by IdaCorp. However, there are certain key factors that IPC should have included in evaluating new thermal resources. Most importantly, IPC should consider carbon dioxide emissions in evaluating thermal resources. IPC should implement mitigation of all carbon emissions, which would add financial value to sales of surplus power on the open market. It would also provide important environmental benefits to IPC's customers. As noted above, in comparing costs of different generating resources, the IRP fails to consider the variable nature of fossil fuel prices.

If IPC chooses to construct new thermal generation, we strongly believe that IPC, and not ratepayers, should cover the variable costs of fuel. IPC has the ability to obtain generation with fixed fuel costs, including wind, solar, and other renewable resources. If IPC chooses to forgo

those sources for thermal generation with highly variable fuel costs, the company must bear the risk of that decision.

4) Shoshone Falls Upgrade

We object strongly to the proposal to expand the Shoshone Falls hydropower facility. While we favor efficiency upgrades at existing hydropower facilities, we do not favor this kind of expansion that would more than quintuple the capacity of the project, diverting even more water away from the natural stream channel at Shoshone Falls, one of Idaho's treasures. Furthermore, relying even more on the hydropower system to meet energy demands will not address the conditions that led to last year's energy crisis. Indeed, it would only exacerbate those conditions by putting ratepayers even more at the mercy of unpredictable water conditions.

Dated this 29 day of August, 2002.

On behalf of the IRU, NW Energy Coalition, and LAW Fund

(for) William M. Eddie
Land and Water Fund of the Rockies